**Listing of Claims**

This listing of claims replaces all prior versions, and listings, of claims in the application:

Claims 1.-3. (Canceled)

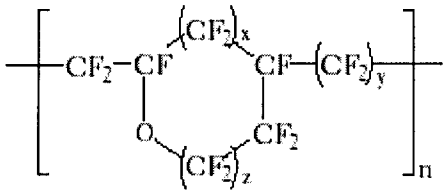
4. (Currently Amended) A pellicle made by a process comprising:

fluorinating a surface of an already-formed polymeric film using a technique that increases fluorine atoms on the film surface while leaving the bulk unchanged,

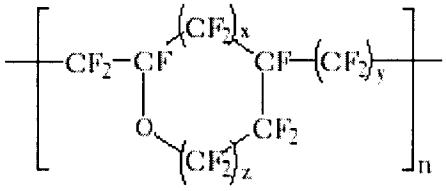
wherein the fluorinated surface comprises a perfluorinated copolymer of tetrafluoroethylene and 2,2-dimethyl-1,3-dioxole, the copolymer perfluorinated to an extent characteristic of the pellicle film having been fluorinated after polymerization to eliminate hydrogen atoms from the polymer backbone in the fluorinated surface.

5. (Original) The pellicle polymer of claim 4, wherein the technique is selected from the group consisting of ion beam fluorination, plasma fluorination, atomic layer deposition, and remote plasma deposition.

6. (Currently Amended) A polymer pellicle made by a process comprising subjecting a film comprising ~~a PVDF or~~ a material having the structure

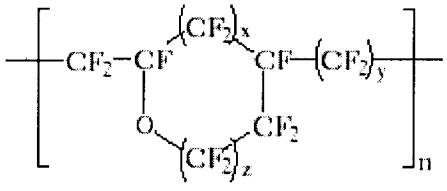


, post formation of the film, to ion beam fluorination, plasma fluorination, atomic layer deposition, and/or remote plasma deposition to provide ~~PVDF or~~ a fluorinated version of the material having the structure



7. (Canceled)

8. (Previously Presented) The polymer pellicle of claim 6, wherein durability of the polymer pellicle is improved at 157 nm wavelength compared to a standard PVDF or a standard material having the structure



9. (Previously Presented) The pellicle of claim 4, wherein the surface of the film is subjected, post formation of the film, to ion beam fluorination, plasma fluorination, atomic layer deposition, and/or remote plasma deposition to improve the film's optical properties, durability, and/or friction properties, wherein the optical properties, durability and/or friction properties are improved compared to a film that has not been subjected to ion beam fluorination, plasma fluorination, atomic layer deposition, and/or remote plasma deposition.

10. (Previously Presented) The pellicle of claim 9, wherein the optical properties and durability are improved at 157 nm compared to a film that has not been subjected to ion beam fluorination, plasma fluorination, atomic layer deposition, and/or remote plasma deposition.

11. (Currently Amended) A pellicle made by a process comprising fluorinating a surface of an amorphous fluoropolymer, post formation of the a pellicle from the amorphous fluoropolymer, by ~~a method selected from ion beam fluorination, plasma fluorination,~~ atomic layer deposition~~, and remote plasma deposition~~, wherein the surface of the amorphous fluoropolymer is fluorinated while leaving the bulk unchanged, and wherein the treated surface comprises a molecular layer that includes the reaction product of a monolayer of a first chemisorbed species and a second species.

12. (Currently Amended) The pellicle of claim 11, wherein the process results in the surface deposition of ~~fluorine atoms or~~ fluorine containing groups.

Claims 13.-15. (Canceled)

16. (Currently Amended) An apparatus comprising:

a polymeric pellicle film having a transmissivity suitable for lithography, the pellicle film comprising

a treated surface having a composition characteristic of exposure to a fluorinating process, and

a bulk having a composition characteristic of remaining unchanged by the fluorinating process,

wherein the treated surface comprises a perfluorinated copolymer of tetrafluoroethylene and 2,2-dimethyl-1,3-dioxole, the copolymer perfluorinated to an extent characteristic of the pellicle film having been fluorinated after polymerization to eliminate hydrogen atoms from the polymer backbone in the treated surface.

17. (Previously Presented) The apparatus of claim 16, wherein the treated surface has a composition characteristic of exposure to fluorinated ions.

18. (Previously Presented) The apparatus of claim 16, wherein the treated surface comprises implanted fluorinated species characteristic of plasma treatment with ions.

19. (Previously Presented) The apparatus of claim 16, wherein the treated surface comprises a molecular layer that includes the reaction product of a monolayer of a first chemiscrbed species and a second species.

20. (Currently Amended) The apparatus of claim 19, wherein one of the first chemisorbed species and the second species comprises $CFR_1=CR_2R_3$, wherein each of $R_1$, $R_2$, and $R_3$ are, independent of one another, a fluorine atom or a monovalent fluorine-containing organic group, or wherein $R_1$ and $R_2$ form a bivalent fluorine containing organic group and [[R3]] $\underline{R_3}$ is a fluorine atom or a monovalent fluorine containing organic group, or wherein $R_2$ and $R_3$ form a bivalent fluorine-containing organic group and $R_1$ is a fluorine atom or a monovalent fluorine-containing organic group.

21. (Previously Presented) The apparatus of claim 16, wherein the treated surface comprises a vapor deposited layer that is largely independent of the composition and surface properties of the bulk.

22. (Canceled)

23. (Previously Presented) The apparatus of claim 16, wherein the pellicle film comprises an amorphous fluoropolymer.

24. (Previously Presented) The apparatus of claim 23, wherein the amorphous fluoropolymer comprises PVDF.

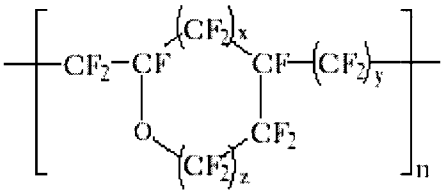
25. (Currently Amended) ~~The~~ An apparatus ~~of claim 23,~~ comprising:

a polymeric pellicle film having a transmissivity suitable for lithography, the pellicle film comprising an amorphous fluoropolymer that comprises

a treated surface having a composition characteristic of exposure to a fluorinating process, and

a bulk having a composition characteristic of remaining unchanged by the fluorinating process,

wherein the amorphous fluoropolymer comprises a polymer having the structure



26. (New) The pellicle of claim 11, wherein one of the first chemisorbed species and the second species comprises $CFR_1=CR_2R_3$, wherein each of $R_1$, $R_2$, and $R_3$ are, independent of one another, a fluorine atom or a monovalent fluorine-containing organic group, or wherein $R_1$ and $R_2$ form a bivalent fluorine containing organic group and $R_3$ is a fluorine atom or a monovalent fluorine containing organic group, or wherein $R_2$ and $R_3$ form a bivalent fluorine-containing organic group and $R_1$ is a fluorine atom or a monovalent fluorine-containing organic group.